

# **Airflow resistivity measurement by using two different alternating airflow apparatus**

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Airflow resistivity is one of the main parameters governing the acoustic behavior of porous materials. The assessment of the above-mentioned parameter is, therefore, of major concern for describing the acoustic behavior of a given porous material above all when using analytic or semi-empirical models.

The international standard ISO 9053 specifies two different methods to measure the airflow resistivity, namely a steady-state airflow method and an alternating air-flow method.

This paper reports comparative measurements performed both on a calibrated sample (sintered material) and on glass fiber, rock fiber, polyester fiber and polyethylene fiber materials by using two different apparatus for airflow measurement.

Both measurement apparatus are based on an alternating airflow method and differ each other, essentially, for the air handling system consisting of an oscillating piston for the first apparatus and a loudspeaker in the other one.